

Collage of Pharmacy
Microbiology Department



Lifestyle

and its impact on health

Public Health Course Students
Spring 2017

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Public Health Course Students

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1. Nutrition and Dietary Habits and their Relation to Obesity

Nutrition and good dietary habits are keys to maintain good health. Maintaining a healthy life style and adhering to dietary guidelines assure productivity and long healthy life on long-term basis. In order to achieve such a healthy physical and mental state, there are some factors that need to be put into consideration. On the other hand, obesity has been one of the main consequences of adapting poor food intake choices and physical inactivity. Obesity occurs when you eat more calories than you use and is defined as being 20% or more over the maximum desirable weight for a man's height or 25% or more in females. Overweight is likewise characterized as having a BMI more than 30 kg/m². Simply you would suffer from obesity if you eat too much and move too little.

The balance between calories-in and calories-out differs for each person. There are factors that might affect person's weight that include

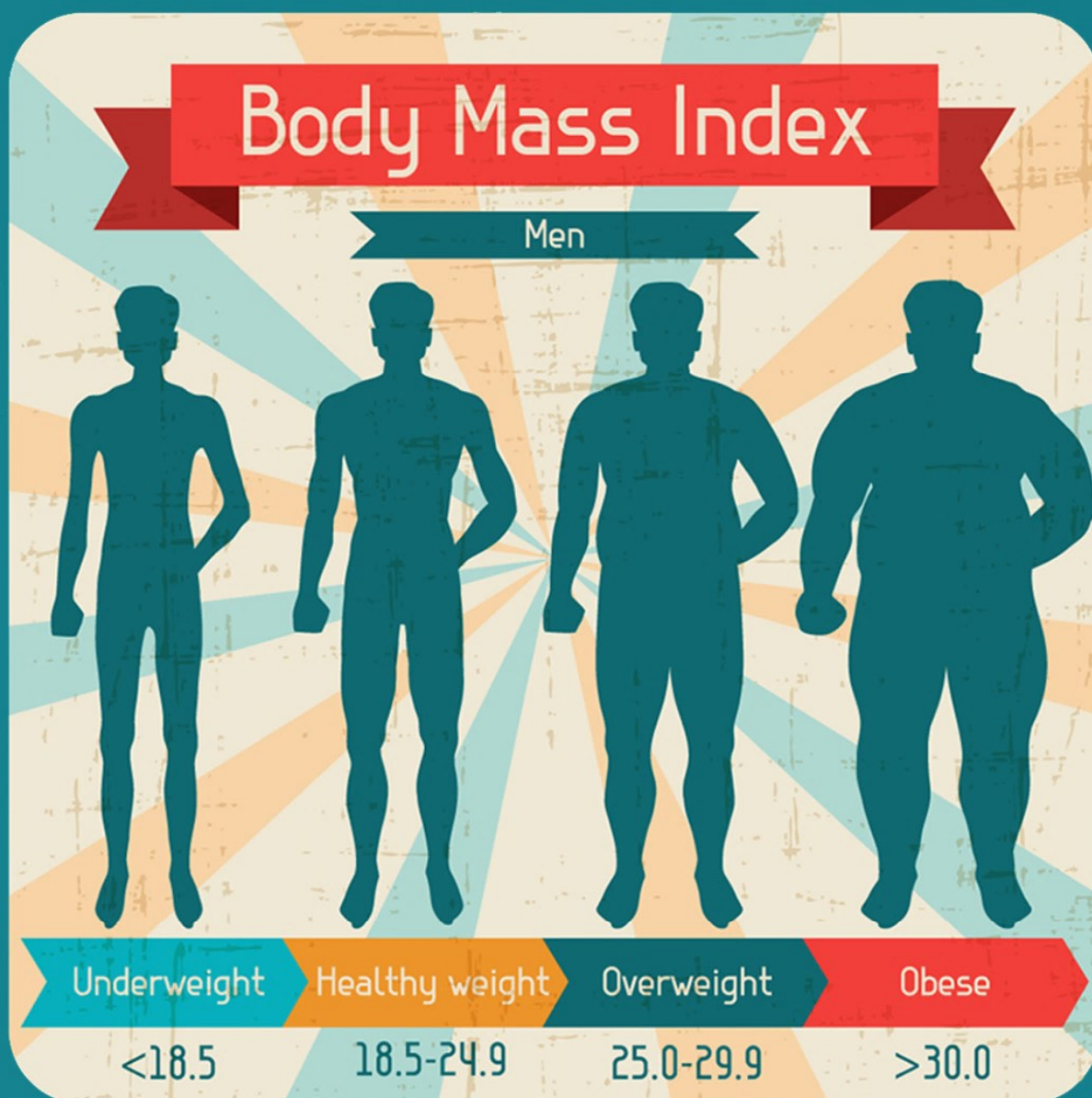
1. Genetic Makeup
2. Nvereating
3. Eating High-Fat Foods
4. Physically Inactivity



1. Nutrition and Dietary Habits and their Relation to Obesity

Body Mass Index (BMI):

Dividing a person's body weight in kilograms by their height in meters squared (weight [kg] height [m²]) or by using the conversion with pounds (lbs.) and inches (in) squared as shown below, this number can be misleading, however, for very muscular people, or for pregnant or lactating women.



1. Nutrition and Dietary Habits and their Relation to Obesity

Body Mass Index

Women



Underweight

<18.5

Healthy weight

18.5-24.9

Overweight

25.0-29.9

Obese

>40.0

1. Nutrition and Dietary Habits and their Relation to Obesity

Examples for Foods that Cause Obesity:



White Bread



Soda Drinks



French Fries



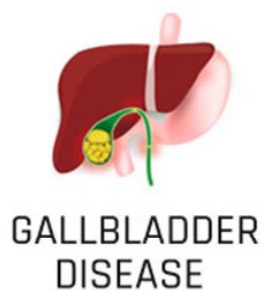
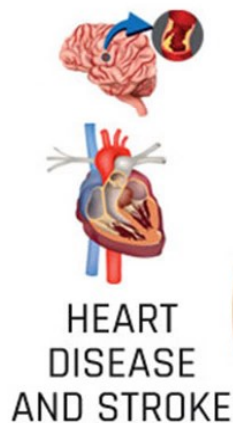
Sweet Candy

1. Nutrition and Dietary Habits and their Relation to Obesity

Obesity Problems:

The various mental, physical and financial outcomes of weight are notable. Youth heftiness influences confidence and has negative results on the psychological and social advancement. Conditions, for example, type II diabetes mellitus, hypertension, and hypercholesterolemia.

HEALTH RISKS of Being **OVERWEIGHT OR OBESE**



OSTEOARTHRITIS



1. Nutrition and Dietary Habits and their Relation to Obesity

How to Prevent Obesity:

1. There are various regimens to control the diet; reducing fat, carbohydrates and alcohol intake, consuming smaller portion sizes by using small plates and spoons in every meal, boosting metabolism and ensuring the consumed energy per day is burnt by consuming large breakfast and easing on the food intake for the rest of the day, combining different foods to reduce the total energy intake or finally focusing on single low energy foods.

2. Since individuals' nourishment decisions are formed by their environment, it's basic for governments to advance strategy and ecological changes that make healthy foods more open and lessening the accessibility and advertising of unhealthful foods. To overcome this issue, some methods have to be adapted to achieve reasonable results. Providing good nutritional knowledge is a very important first step. Methods would be more efficient if people knew nutritional facts about what they are consuming, and only then would they make the right choices. A diet rich in organic fruits, vegetables and dairy products and a balanced protein-fat consumption would be of a great impact on obese population. Advising children and adolescents in schools to stay away from junk and fast foods and giving them nutrition classes is an important action to prevent malnutrition and obesity that could lead to more serious diseases as cardiovascular diseases and diabetes.

2. Occupational Hazards for Workers with Toxic or Radioactive Exposure

Toxic Materials:

are substances that may cause harm to an individual if it enters the body. Toxic materials may enter the body in different ways. These ways are called the route of exposure.

Route of exposure is through inhalation (breathing it into the lungs), skin contact and Ingestion is another, less common, route of exposure in the workplace.

Examples for toxic materials:

1. **Methylene Chloride**, causes skin and eye irritation.

2. **Isopropyl Alcohol**, has mild central nervous system depressant. High vapour concentrations may cause headache, nausea, dizziness, drowsiness, incoordination and confusion. Very high exposures may result in unconsciousness and death.

3. **Acetone**, its swallowing or vomiting of the liquid may result in aspiration into. and very high concentrations may cause headache, nausea, dizziness, drowsiness, incoordination and confusion.



2. Occupational Hazards for Workers with Toxic or Radioactive Exposure

Contact of Workers with these Toxic Materials can Lead to:

1. Inhalation of a solvent may bring about bronchial inflammation, dizziness, focal sensory system, sickness, cerebral pain.
2. Skin contact with solvents may make drying, and skin irritation.
3. Solvents have serious toxicological impacts.
4. Inorganic hydroxides can make genuine harm skin tissues on the grounds that a defensive protein layer does not form.



2. Occupational Hazards for Workers with Toxic or Radioactive Exposure

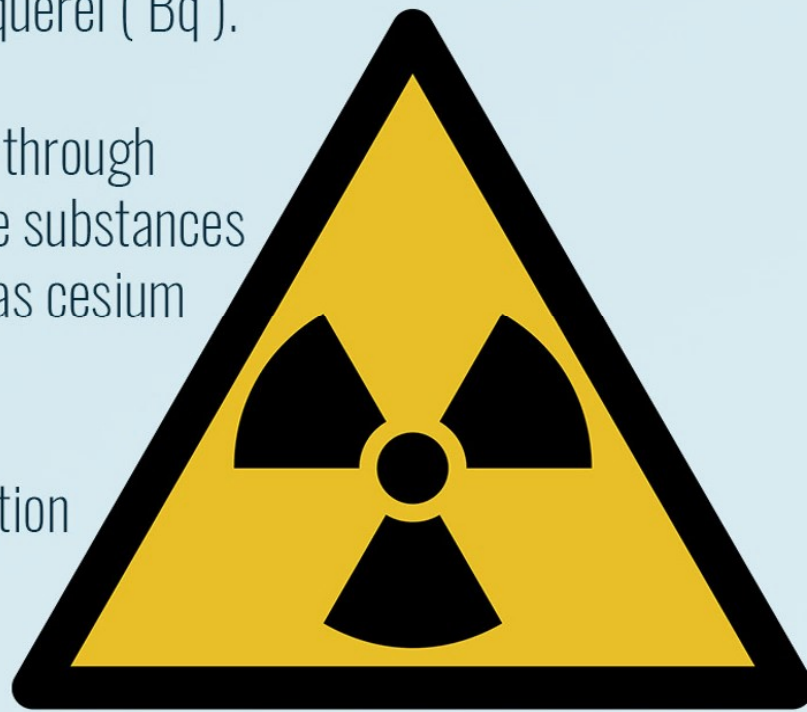
Radioactive Materials:

There are 2 types of radiation, the ionizing and nonionizing radiation. The ionizing radiation one have much energy that allow him to liberate and exiting electrons from the targeted atom and making it a charged atom, while the non-ionizing radiation such as radio waves, UV and visible light does do as the ionized. Radioactivity is a phenomenon where energy released from spontaneously and there is measuring unit which called Becquerel (Bq).

Radioactive materials can cause damage through two ways; Contamination with radioactive substances that can be found in food or water or air as cesium -137 and iodine -131. and Irradiation.

Types of Workers more Exposed to Radiation Dangers:

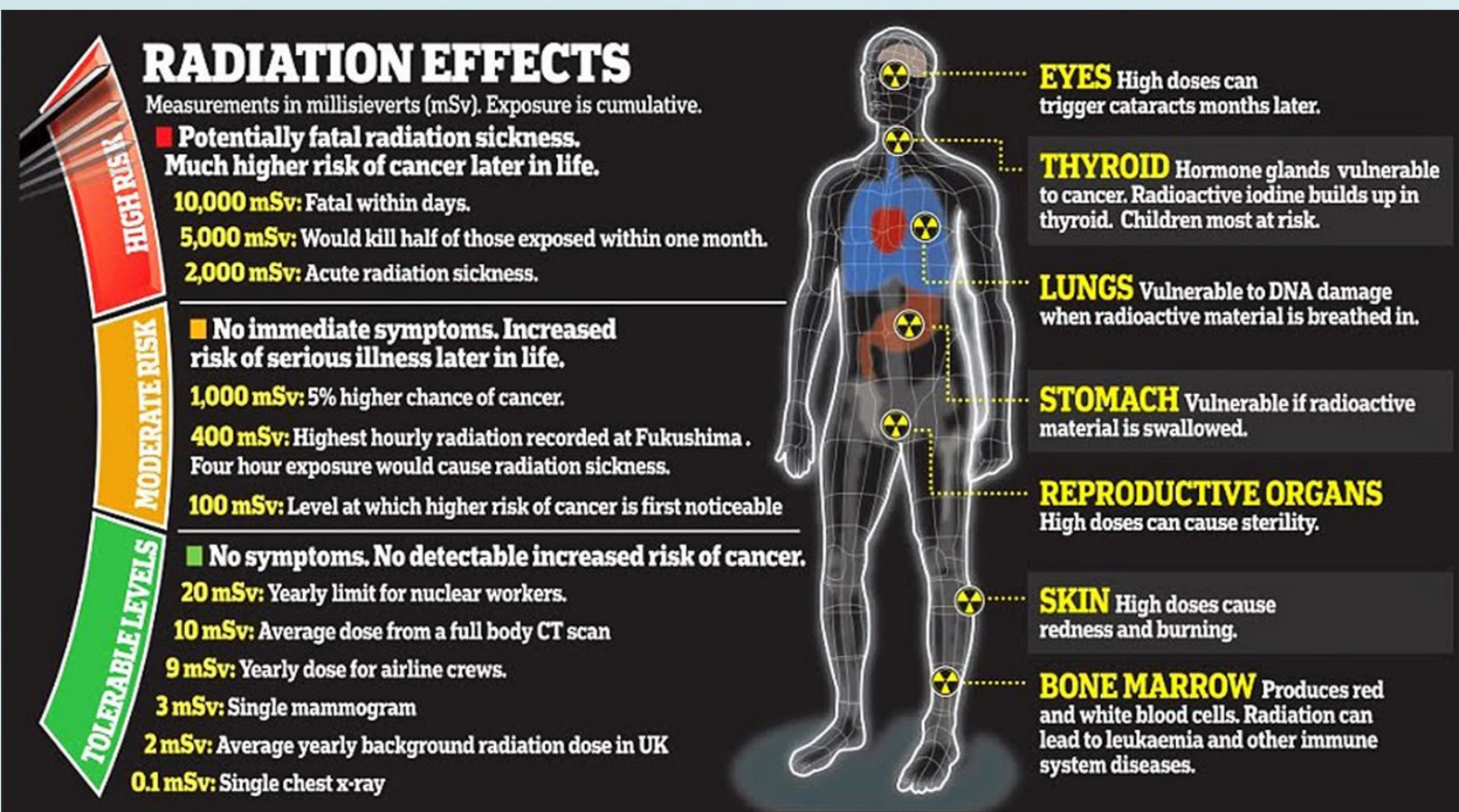
1. Workers at Nuclear Stations.
2. Radiographers.
3. Research Scientists.



2. Occupational Hazards for Workers with Toxic or Radioactive Exposure

Health Hazards due to Radiation Exposure:

Nausea, vomiting, headache, diarrhea, hair loss to cancer induction on long term exposure as radioactive materials that enter the body through different ways as inhalation or swallowing with contaminated water or food, remain emit radiations that can change the chemistry of inside body and cause DNA mutations that lead finally to progression of cancer.



2. Occupational Hazards for Workers with Toxic or Radioactive Exposure

What is the Difference between Acute and Chronic Exposure?

Acute Exposures, are well known from studies of radiotherapy patients, some of whom received whole-body doses; atomic bomb victims; and the few accidents that have occurred in the early days of atomic weapons and reactor development, industrial radiography, and nuclear fuel processing. In addition, few occupational incidents that have resulted in large exposures. NRC data indicate that, on the average, 1 accidental overexposure in which acute symptoms are observed occurs each year. Most of these occur in industrial radiography and involve exposures of the hands rather than the whole body.

Chronic Exposure, which may cause delayed effects but not prompt effects, refers to small doses received repeatedly over long time periods; for example, 20-100 mrem (a mrem is one-thousandth of a rem) per week every week for several years. Concern with occupational radiation risk is primarily focused on chronic exposure to low levels of radiation over long time periods.

3. Impacts of Cigarette Smoking on Health

Cigarette smoking is the leading cause of preventable death in the world. Passive and occasional smokers have an increased chance of cardiovascular and respiratory diseases than non-smokers. Smoking cigarettes nowadays is considered as one of the most harmful habit that affect the whole body's organs not only the lungs. Smoking not only affects smokers but also anyone in their environment. Environmental tobacco smoke which is known as second-hand smoke or passive smoke is the combination of the smoke given off by a burning tobacco product called "side stream smoke" and the smoke blown out by a smoker which is the "mainstream" smoke.

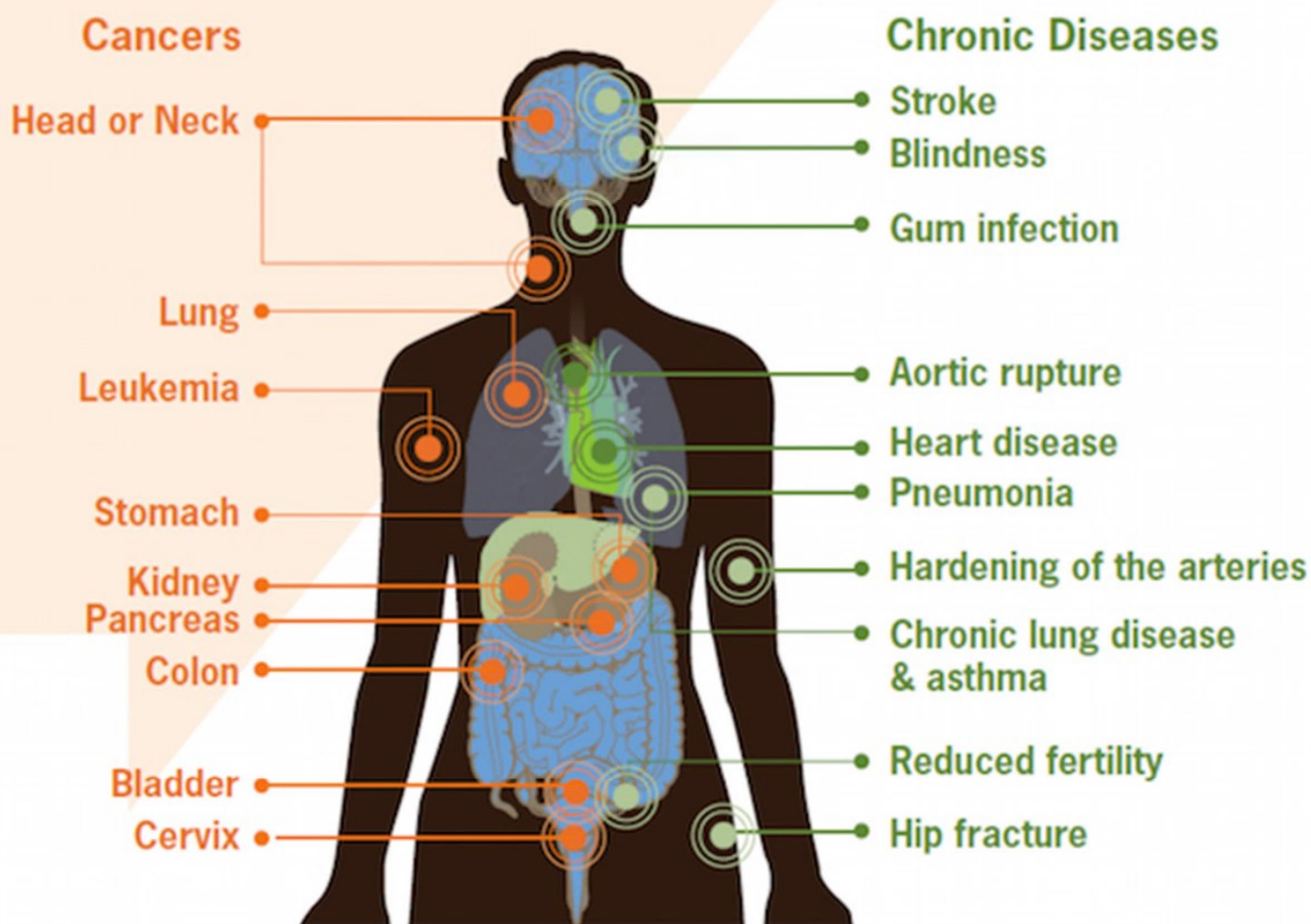


3. Impacts of Cigarette Smoking on Health

Effects of Smoking:

Risks from Smoking

Smoking can damage every part of the body



3. Impacts of Cigarette Smoking on Health

1. On Central Nervous System:

Nicotine achieves your cerebrum in negligible seconds. It's a focal sensory system stimulant, so it makes you feel more empowered for a little time. As that impact dies down, you feel tired and ache for additional. Nicotine is propensity framing. Smoking builds danger of macular degeneration, waterfalls, and poor visual perception. It can likewise debilitate your feeling of taste and feeling of notice, so nourishment may turn out to be less pleasant.



3. Impacts of Cigarette Smoking on Health

2. On Respiratory System:

Smoking impacts the ability of the lungs to function properly and causes lung diseases such as Emphysema, the air sacs in your lungs are pulverized. In endless bronchitis, the covering of the containers of the lungs ends up plainly excited. After some time, smokers are at expanded danger of creating COPD. Long haul smokers are additionally at expanded danger of lung disease. According to the cdc (2016) "Smoking can cause lung disease by damaging your airways and the small air sacs (alveoli) found in your lungs".



Healthy lungs

In healthy people, the lungs are light pink



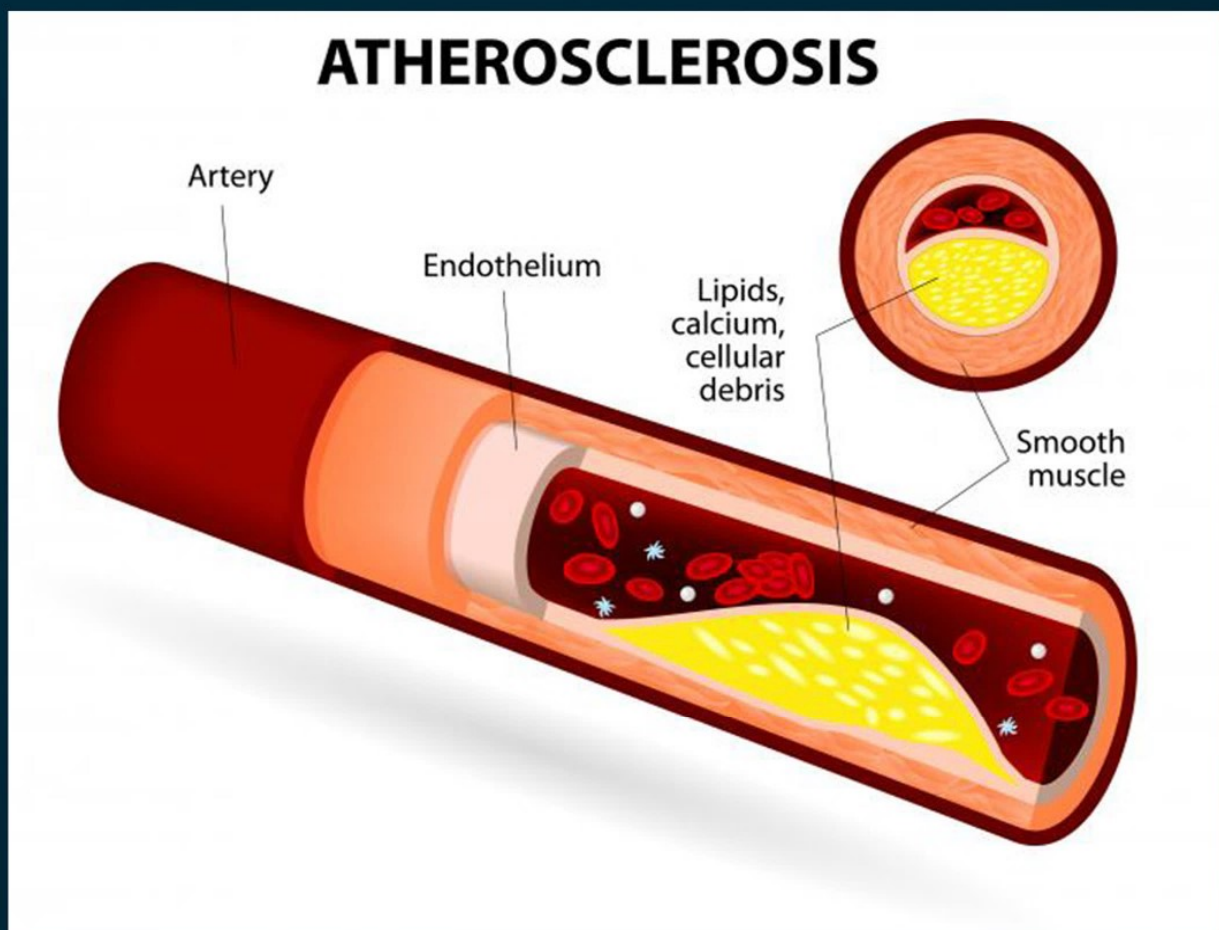
Smokers' lungs

In smokers, the lungs appear dark and mottled

3. Impacts of Cigarette Smoking on Health

3. On Cardiovascular System:

Smoking harms your whole cardiovascular framework. Nicotine causes veins to fix causing peripheral artery disease. Smoking brings down great cholesterol levels HDL and raises blood pressure, which can cause atherosclerosis. Smoking raises the danger of shaping blood clots. Blood clots and debilitated veins in the cerebrum increment a smoker's danger of stroke. smokers are at more serious danger of leukemia. according to the cdc (2016) "Smoking can also reduce blood flow to the legs and the skin".



3. Impacts of Cigarette Smoking on Health

4. On Digestive System:

Smokers are at extraordinary danger of creating oral issues. Tobacco utilize can bring about gum gingivitis or periodontitis. These issues can prompt tooth decay, tooth misfortune, and awful breath. Smoking likewise builds danger of tumor of the mouth, throat, larynx, and throat. Smokers have higher rates of kidney tumor and pancreatic growth. Smoking likewise affects insulin, making it more probable that you'll create insulin resistance. That puts you at expanded danger of type 2 diabetes. Smoking additionally discourages hunger, so you may not get every one of the nutrients your body needs.

The Effects of Smoking on Your Digestive System

Although many believe that smoking cigarettes aids digestion, it does more harm than good. Smoking can actually damage all parts of your digestive system, preventing your body from converting food into the nutrients it needs to live.

Gastric Reflux

Cigarette smoke relaxes the lower esophageal sphincter (LES). When the LES relaxes, acidic stomach juices reflux into esophagus. Smoking can increase esophageal acid exposure by 50 percent. Smoking can also affect salivary function. Smokers' saliva contains smaller amounts of bicarbonates, reducing the ability of saliva to neutralize stomach acid.



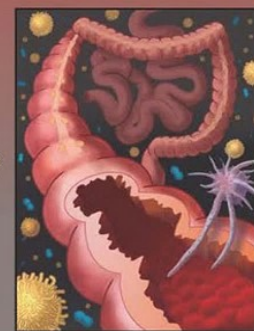
Peptic Ulcer

A peptic ulcer is a sore in the lining of the stomach. A bacteria called *Helicobacter pylori* weakens the protective coating of the stomach, allowing acid to eat through it. The likelihood of developing an ulcer from a bacterial infection is increased if you smoke cigarettes.



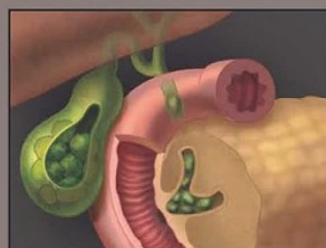
Crohn's Disease

Smokers have a higher risk of developing Crohn's Disease, an inflammatory bowel disease that causes swelling in the lining of the intestine. Symptoms include chronic diarrhea, abdominal pain, fever and loss of appetite. While symptoms come and go, Crohn's Disease patients who smoke often require more aggressive forms of treatment, like drug therapy and repeat surgeries to remove sections of the intestines.



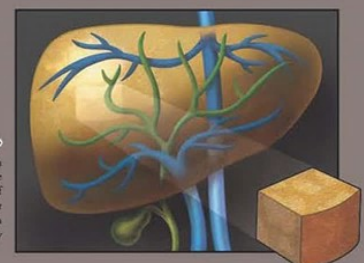
Gallstones

Smoking puts you at a higher risk of developing gallstones, hard pebbles made of cholesterol, calcium salts and bilirubin. Gallstones can block the normal flow of bile into your small intestine.



Fatty Liver

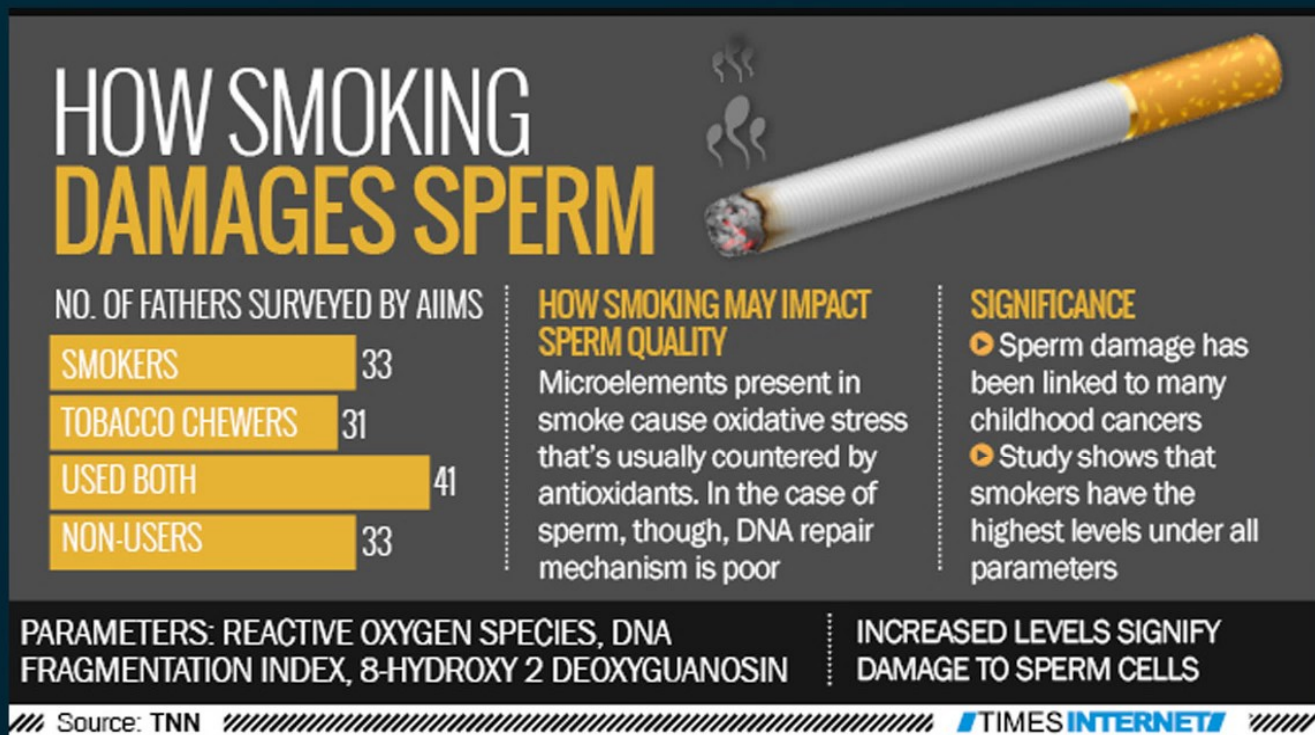
Smoke exposure, even second-hand, can increase your liver's production of fatty acids. Excess fat in your liver can cause inflammation and scarring, and eventually lead to liver failure.



3. Impacts of Cigarette Smoking on Health

5. On Reproductive System:

Studies have also found that cigarette smoking may lead to sexual impotence in both males and females. While affecting both genders differently the outcome is the same which is deficiency in reproduction. In men smoking effects both the sperm and the sexual organs according to the American Cancer Society (2015) “Smoking damages the arteries, and blood flow is a key part of male erections. Male smokers have a higher risk of sexual impotence”. In females the mechanism in which smoking damages the reproductive system varies but ultimately leads to difficulty in consumption and miscarriages. The American Cancer Society (2015) also stated that Women who smoke are more likely to have trouble getting pregnant. When they are pregnant they also tend to have problems that can hurt both mother and baby.



4. Exercise of Physical Activity in our Life Style vs Sedentary Regular Life

In life there is no medicine that could cure all, but if there is one we could consider it would be physical activity and exercise, regular activity has a magical effect on our health:

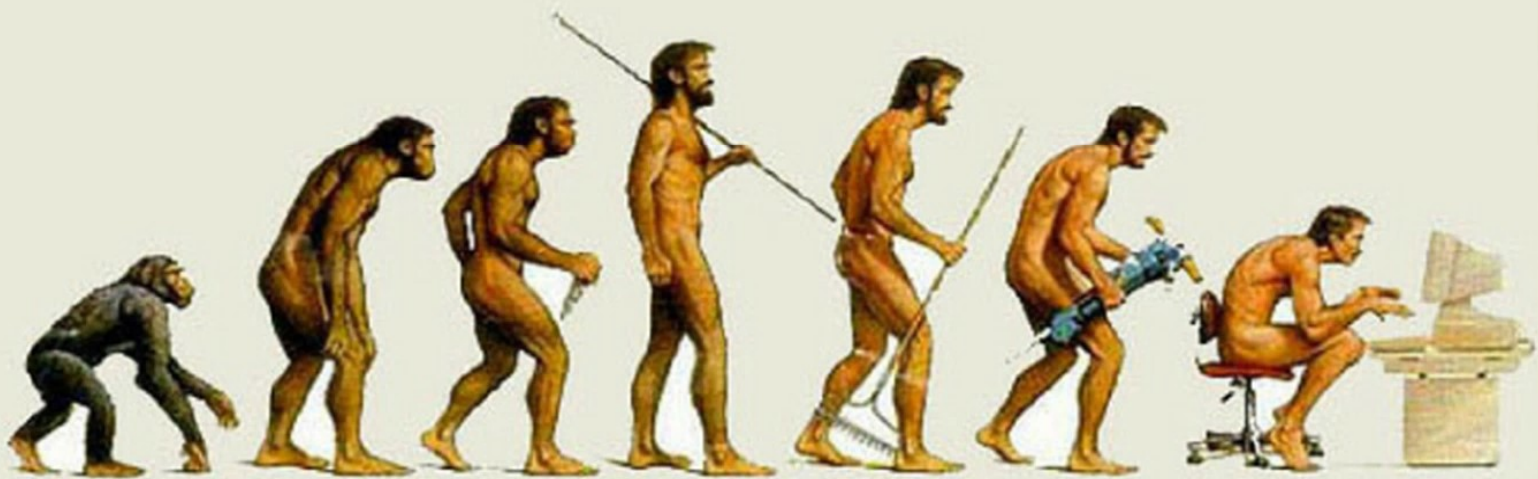


1. Physical activity helps you live longer and prevent many chronic diseases, such as heart disease, high blood pressure
2. Physical activity improves cardiorespiratory and muscular fitness
3. Physical activity raises your metabolism and helps you lose weight more easily
4. Physical activity helps reduce stress, anxiety, and depression and improve your mood
5. Physical activity helps maintain brain function in older adults
6. Physical activity helps with digestion and promotes regular bowel movements
7. Physical activity increases bone density.
8. Physical activity helps you age more gracefully by maintaining your looks and your agility
9. Physical activity improves your overall quality of life
10. Physical activity improves sleep quality.

4. Exercise of Physical Activity in our Life Style vs Sedentary Regular Life

Sedentary Lifestyle:

Is type of lifestyle without physical activity. The one who lives a sedentary lifestyle may be known as a potato couch. The one who living a sedentary lifestyle is lying or sitting, while reading, watching television, video games playing, or mobile phone/computer using for too much of the day. A sedentary lifestyle can cause death.



A Sedentary Lifestyle

= Sitting Is The New Smoking =

4. Exercise of Physical Activity in our Life Style vs Sedentary Regular Life

Effect of Sedentary Lifestyle on Health:

- High risk of CVS and obesity disease risk factors
- High risk of depression disease
- Higher overall energy intake and consumption of energy-dense food and drinks, and watching
- Lower performance in academic, school performance so poor
- Decrease psychosocial wellbeing and self-worth
- Decrease social behaviour
- Decrease sleep regime



4. Exercise of Physical Activity in our Life Style vs Sedentary Regular Life

Physical Activity:

Is any type of movement by skeletal muscle (such as arms and legs) that contribute to burn the energy we have from the food we eat. There are many types of physical activity: walking, swimming, running, participating in physical activities which improve an individual's overall health and being well, physical activity, is an activity that you enjoy.

walking



gardening



hiking



dancing



cycling



active recreation



swimming

4. Exercise of Physical Activity in our Life Style vs Sedentary Regular Life

Effect of Physical Activity on Health:

Being active decrease the risk of colon cancer and CVS disease, type 2 diabetes in adults. Sport participation is related to decrease overweight or obesity and improve physical fitness Active travel contribute to decrease obesity risk and CVS disease mortality among adults, and enhance fitness in children and adults

Making exercises and being physically active makes you feel good and improves your health and also decreases risk of diseases as diabetes and cancer.

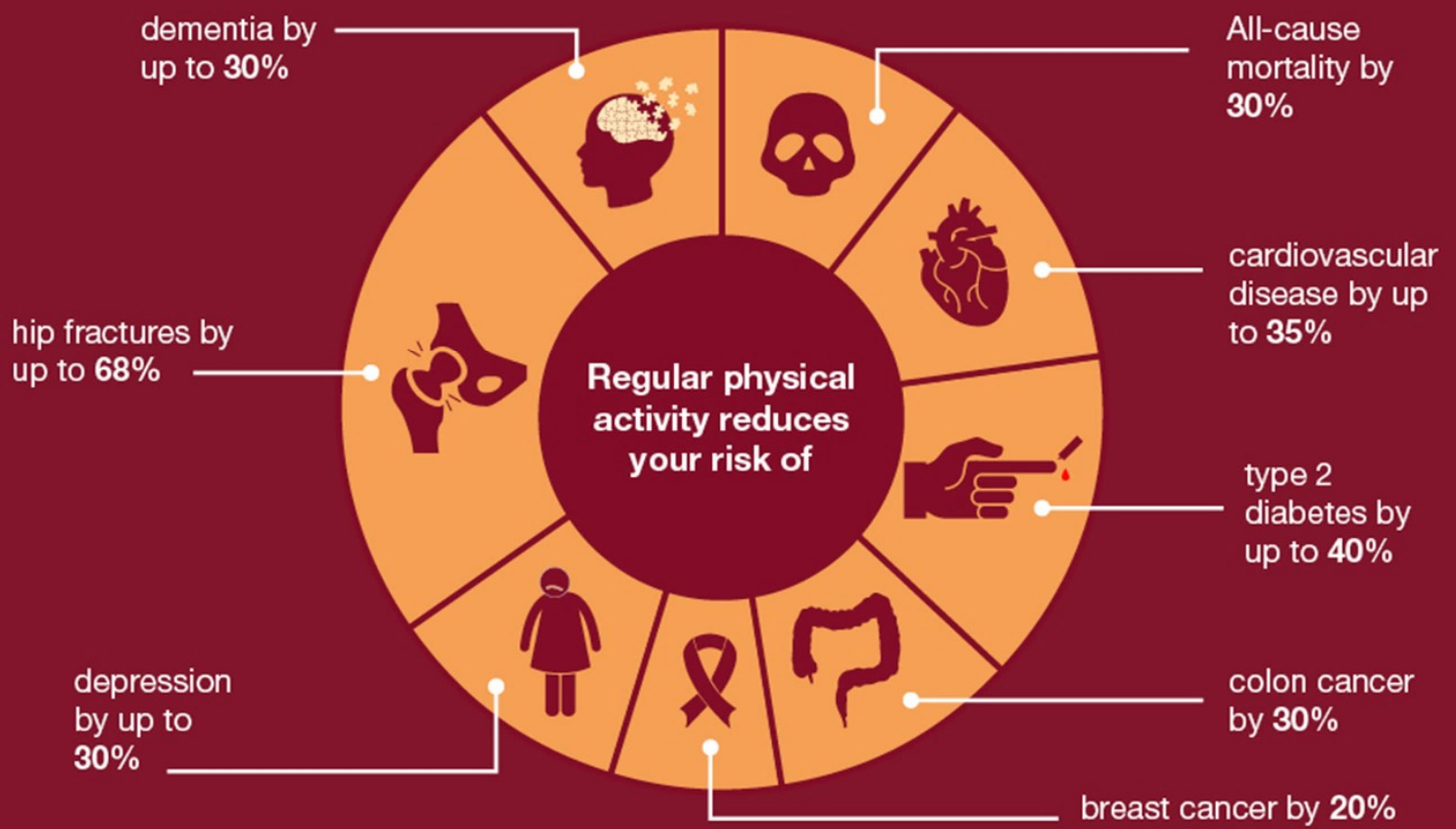
Physical activity have many benefits as:

- Strengthen Your Bones and Muscles
- Improve Your Mental Health and Mood
- Improve Your Ability to do Daily Activities and Prevent Falls
- Increase Your Chances of Living Longer
- Control your weight
- Exercise boosts energy

4. Exercise of Physical Activity in our Life Style vs Sedentary Regular Life

Effect of Physical Activity on Health:

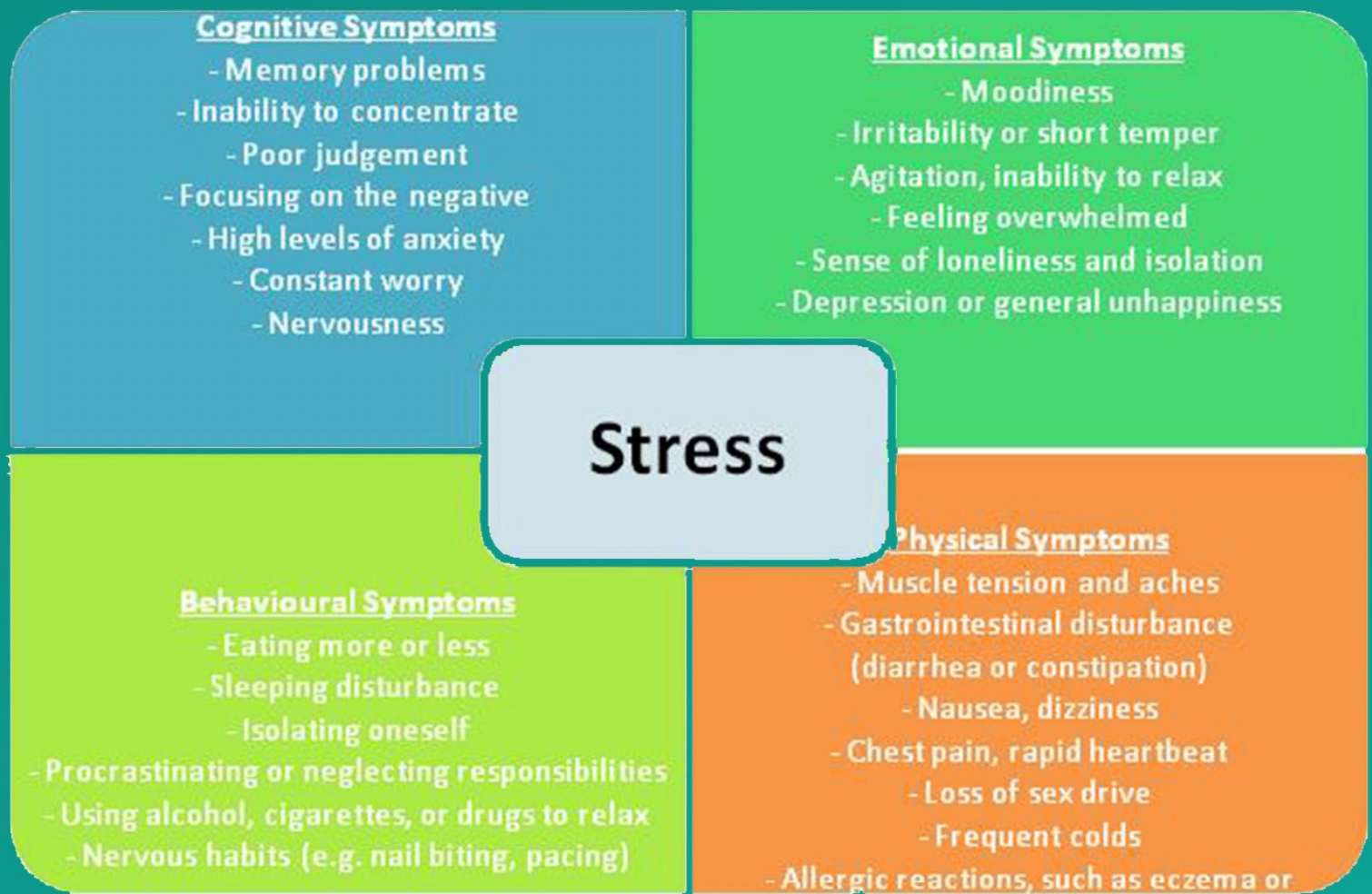
What are the health benefits of physical activity?



5. Stress Management

Defination of Stress:

A physical, mental, or emotional reaction that leads to physical or mental stress. simply stress is any external force or event that affects our body or mind.



5. Stress Management

Types of Stress:

1. Internal Stress:

1. Physical Environment: Noise, bright light, heat, confined spaces
2. Social Interaction: Rudeness, bossiness, aggressiveness by others
3. Organizational: Rules, regulations, deadlines
4. Major Life Events: Birth, death, lost job, promotion
5. Daily Hassles: Commuting, misplaced keys, mechanical

2. External Stress:

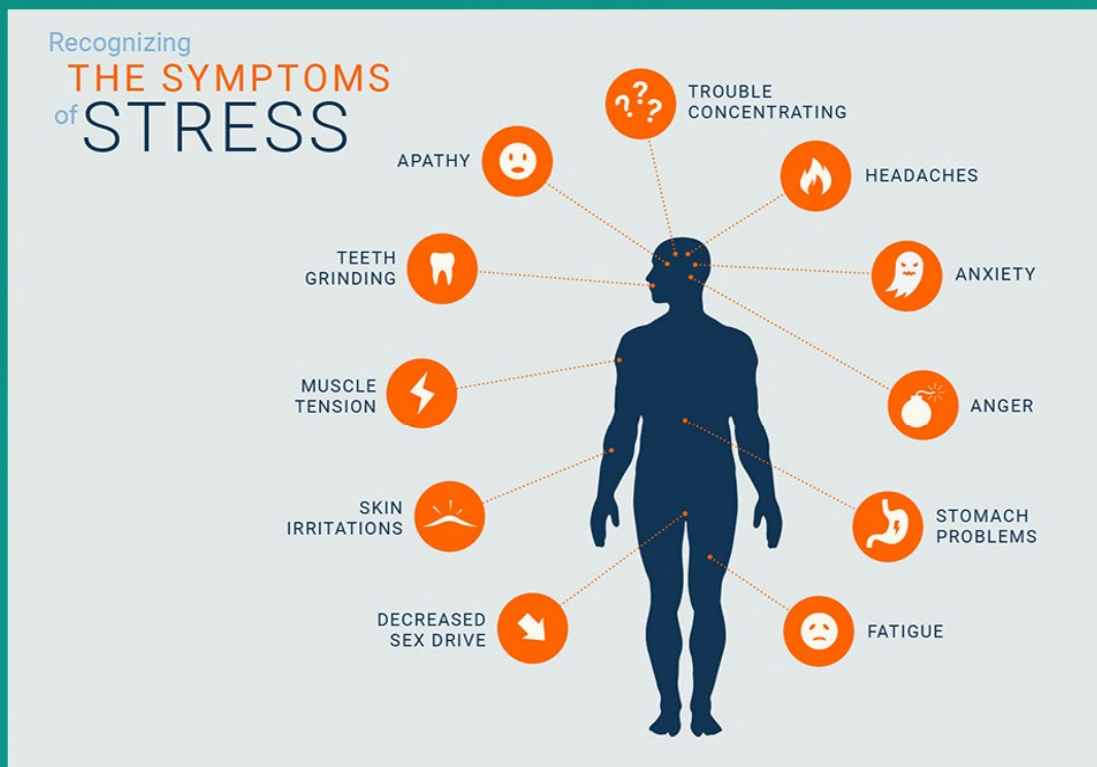
1. Lifestyle Choices: Caffeine, lack of sleep
2. Negative Self-talk Mind: pessimistic thinking, self-criticism, over analyzing
3. Mind Traps: unrealistic expectations, taking things personally, all or nothing thinking, exaggeration, rigid thinking
4. Personality Traits: perfectionist, workaholics

5. Stress Management

Types of Stress:

1. Negative Stress:

It is a contributory factor in minor conditions such as headaches, digestive problems, skin complaints, insomnia and ulcers. Excessive, prolonged and unrelieved stress can have a harmful effect on mental, physical and spiritual health.



2. Positive Stress:

Stress can also have positive effect, spurring motivation and awareness, providing the stimulation to cope with challenging situations, stress also provides the sense of urgency and alertness needed for survival when confronting threatening situations.

5. Stress Management

Stress Management Techniques:

1. Change your Thinking

re-framing is a technique to change the way you look at things in order to feel better about them ,there are many ways to interpret the same situation ,reframing does not change the external reality ,but helps view things in a different light and less stress.

2. Change your Behavior

First get organized, and be assertive. This will help to manage stressful situations and will in time help to reduce their frequency lack of assertiveness often shows low self-esteem and low self-confidence.

3. Change your Lifestyle

Taking care of Diet, smoking, alcohol, exercise, sleep, leisure, relaxation.

Exercise has many benefits, as Improve blood circulation, lower blood pressure, clear the mind of worrying thoughts, and improve self-image, increase social contact.

Relaxation has many benefits, as Lowers blood pressure, combats fatigue, promotes sleep, reduce pain, eases muscle tension

5. Stress Management

Defination of Entertainment:

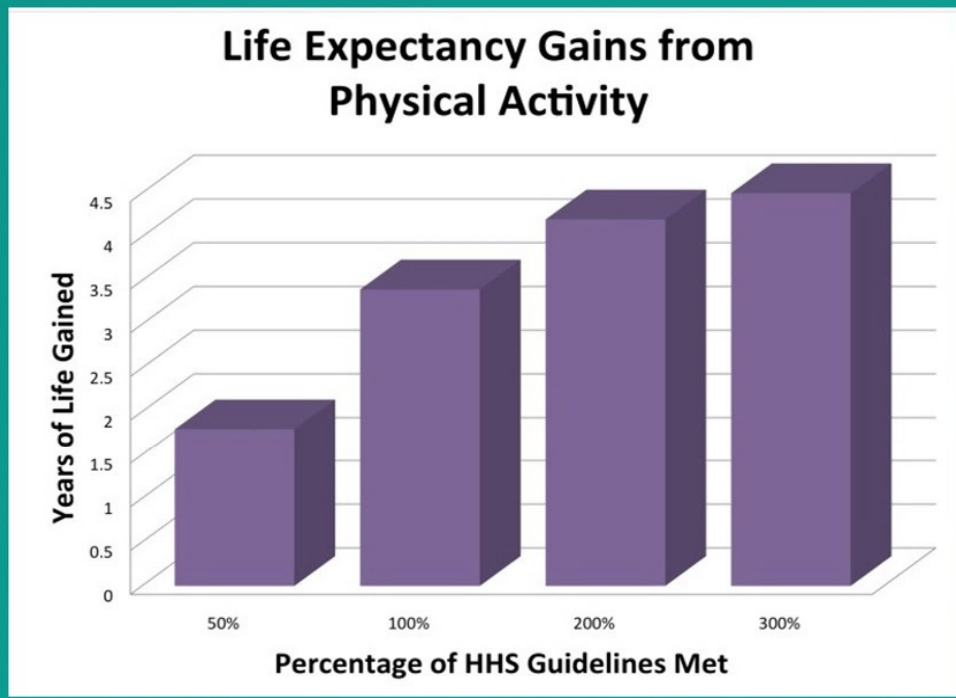
There is a critical relationship between entertainment and the health; the ways of entrainment have both positive and negative effects, positive effects such as stress reduction and health education on the other hand the negative effects of entrainment such eating disorders, bad body image and obesity. So the first positive effect of entrainment such as stress reduction the response to certain comedy its will reduce the stress and will improve the immune function and also increased the numbers of attempts to increase health related behavior. And also make the people more motivated and reduce the aggressiveness. On the other hand the negative effect of entrainment may lead to people less sensitive to any pain but suffering from others and distribute bad signs including eating disorders which lead to obesity, body dissatisfaction and make the thinner women to progressively convert to thicker.



5. Stress Management

Relation of Active Lifestyle and Happiness:

A sedentary lifestyle has been linked with many poor health. Also, the inactivity and laziness increase the risk of becoming obese, developing diabetes, cancer, and cardiovascular disease, and they all lead to die. Research suggests that exercise, walking in the course of daily functioning, participate to avoiding these health problems increasing health state. The increase of physical activity throughout the day also related to psychological health and increase happiness. An active lifestyle has a positive effect on happiness. Recent studies have shown that people with active lifestyle are found to enjoy wellbeing and happiness more than those with less active lifestyle. So, we need to follow an active life style including exercise, physical activity, mental stimulation, combination of work and entertainment activities and positive relationships to promote self-respect and esteem, minimize stress and anxiety, and thus improving our feeling of happiness and wellbeing.



5. Stress Management

Happiness can be Improved or Advanced by Several Ways such as:

- 1) Improving the information about consequences of life choices in happiness.
- 2) Training in art of living skills.
- 3) Physical activity.
- 4) Improving the liability of institutions, because happiness depending on environmental factors.
- 5) Improving liability of the society because happiness depending on macro social conditions in the place you is life.



5. Stress Management

Relationship between Lifestyle and Happiness is important in:

- a) Protects your heart.
- b) Strength the immune system.
- c) Combats stress.
- d) Fewer aches and pains.
- e) Combat disease and disability.
- f) Lengthens our life.

